

Information Item

California Postsecondary Education Commission

Student Access, Institutional Capacity,
and Public Higher Education Enrollment Demand,
2003 to 2013

In this Information Item, the Commission discusses the level of undergraduate demand for California public colleges and universities anticipated in the near term based on present economic circumstances. An Alternative Forecast is then offered that estimates the level of undergraduate demand that reasonably would be expected for the period Fall 2004 to Fall 2013 if State higher education funding, student fees, and course offerings were at levels observed during the State's economic expansion of the late 1990s. By comparing the Commission's Alternative Forecast to actual enrollments over the next several years it will be possible for public officials to get at least a general sense of the gain or loss in educational opportunity by higher education system.

Presenter: Stacy Wilson.

Student Access, Institutional Capacity, and Public Higher Education Enrollment Demand, 2003-2013

*A Report of the California
Postsecondary Education Commission*



CALIFORNIA POSTSECONDARY EDUCATION COMMISSION
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Foreword

SIGNIFICANT ECONOMIC and political events have unfolded in California and the nation since the California Postsecondary Education Commission released its statewide higher education enrollment projections in year 2000 and a series of regional enrollment studies published between 2001 and April 2003. Circumstances that are sure to have immediate implications for California's public higher education enterprise include (a) the recall of one governor and the inauguration of another; (b) an ongoing state budget deficit that could exceed \$5 billion by next fiscal year; (c) a federal deficit which, according to the Congressional Budget Office, could top \$477 billion this year; (d) a California economic recovery that is beginning to post impressive recovery statistics of late, but is nonetheless not expected to be in full swing until the closing years of this decade; and (e) results of recent public opinion polls suggesting that many Californians remain skeptical about the merits of an unprecedented \$15 billion general obligation bond measure that is scheduled for the March 2004 ballot.

Faced with limited federal help and the prospects of a burgeoning State general fund deficit, Governor Schwarzenegger unveiled in January a proposed \$76.1 billion general fund spending plan that increases funding for the California Community Colleges while reducing funding for the University of California (UC) and the California State University (CSU). In anticipation of important legislative budget hearings that will be held over the next several months, the public higher education systems and various policy research organizations are preparing position papers and reports related to enrollment demand, student access, and higher education financing. Recent papers include *Access Lost: An Examination of Supply Construction and Rationing*, by the Chancellor's Office of the California Community Colleges; *Keeping the Promise*, by the Campaign for College Opportunity; *Financing California's Community Colleges*, by the Public Policy Institute of California; and a *Joint Letter in Support of Academic Preparation Programs to the Governor and California Legislature*, by Superintendent Jack O'Connell and the Chief Executive Officers of UC, the CSU and the California Community Colleges.

The purpose of this Commission report is not to render judgments at this particular time on the merits of alternative funding recommendations proposed by various interest groups; rather, it is strongly believed that public officials could benefit during budget deliberations from a rigorous, non-partisan analysis of student access and enrollment demand questions that are not fully understood at this time but are of key interest. Accordingly, this report addresses the following questions:

- What is the level of public higher education enrollment demand that would have been anticipated between 2003 and 2013 if State FTES funding, student Fees, and course offerings were at levels observed during the favorable economic period, 1996 to 2001 (i.e., Commission's Alternative Forecast)? What level of additional FTES capacity would be needed on a yearly basis to accommodate the enrollment growth? What is the increase in marginal cost funding that would be required for instruction?
- What is the level of public higher education enrollment demand currently anticipated between 2003 and 2013 given recent declines in State FTES funding, reduced course offerings, and huge increases in student fee levels?
- If the California State University and the University of California are required to reduce their freshmen enrollments by 10 percent, what is the likely number of qualified prospective first-time freshmen that might be redirected to the California community colleges?
- What is the current size of the educational opportunity gap, as measured by the difference between actual Fall 2003 enrollments and the Commission's Alternative Enrollment Demand Forecast?

Although the focus here is on public colleges and universities, it must be emphasized that a discussion of enrollment demand and student access would not be complete without recognizing the significant contribution that independent colleges and universities make in supporting the instructional, professional, and research needs of California. In fact, independent institutions represent the oldest higher education tradition in California, as evidenced by the founding of Santa Clara University and the University of Pacific in the 1850s several years before the first public college was established.

The Commission, in partnership with the Association of Independent California Colleges and Universities (AICCU), is presently conducting an extensive survey research study of the independent sector. Once the study is completed, the Commission and the AICCU will know more precisely the (a) instructional capacity of the independent sector, (b) the amount of additional capacity independent institutions intend to add between 2003 and 2013, and (c) the number of first-time freshmen and community college transfer students independent institutions plan to enroll over the next ten years. This information will be used by the Commission to craft a robust higher education plan intended to maximize higher education opportunity and student success.

Before proceeding to a discussion of enrollment demand, a brief summary of the Governor's proposed higher education budget is outlined in the next section.

**Brief summary of
the Governor's
proposed higher
education budget**

The California Community Colleges received priority in the proposed 2004-05 State Budget Plan. Overall, the Governor's budget proposes a 7.6 percent increase in community college program funding for a total of \$6.86 billion. The budget figure includes \$125.1 million for enrollment growth that would enable the community colleges to serve approximately 33,000 additional Full-time Equivalent Students (FTES). About \$4 million is also provided to fund additional growth in non-credit FTES.

Less favorably, the budget proposes a 44 percent increase in community college fees for most students, from \$18 to \$26 per unit. Students who have earned a bachelor's or other advanced degree would be required to pay \$50 per unit. Some educators and public officials have expressed concern regarding the potential impact of the fee increases on student access. Other officials and educators note that the new fee level would enable needy students to receive the maximum federal Pell Grant award. Currently, community college fees are too low to enable students to receive the maximum Pell Grant possible.

With respect to the University of California, the Governor proposes to reduce general fund support by \$198 million, or by 6.9 percent from the revised 2003-04 level. To backfill for the loss in state support, it is proposed that average undergraduate resident fees increase from \$4,984 to \$5,482 per year and that graduate student fees increase by 40 percent, from \$5,219 to \$7,307. The budget would also reduce first-time freshmen enrollments by 10 percent and eliminate all general fund outreach funding. Consistent with legislative intent, no funding is provided for enrollment growth.

For the California State University, general fund would decline by \$221 million, or about 8.4 percent. Like UC, most of the reductions would be backfilled with an increase in average undergraduate resident fees from \$2,046 to \$2,250 per year for students taking more than six units. Graduate student fees would increase by 40 percent, from \$2,256 to \$3,156. First-time freshmen enrollments would be reduced by 10 percent and general outreach funding would be eliminated.

For the first time in the history of this state, the UC and CSU systems might not be able to accommodate all qualified freshmen that seek admission. In the past, qualified freshmen that were not offered admission to the UC or CSU campus of their choice had the option of enrolling at another campus where space was available. The Governor's plan would redirect some of these promising freshmen to the community colleges with the understanding that they would be given preference to the UC and CSU systems as upper division community college transfer students.

As noted in a recent Commission Press Release, the Governor also proposed a number of changes in the State's Cal Grant program and in the institutional aid programs offered by the University and the State University. Accordingly, those two systems would be asked to use only 20 per-

cent of new fee revenue for institutional aid rather than the 33 percent the systems have used in the past. Cal Grant awards to new students attending a private college would be reduced from \$9,708 to \$5,482 and the income threshold would be changed so that fewer students would be eligible for awards.

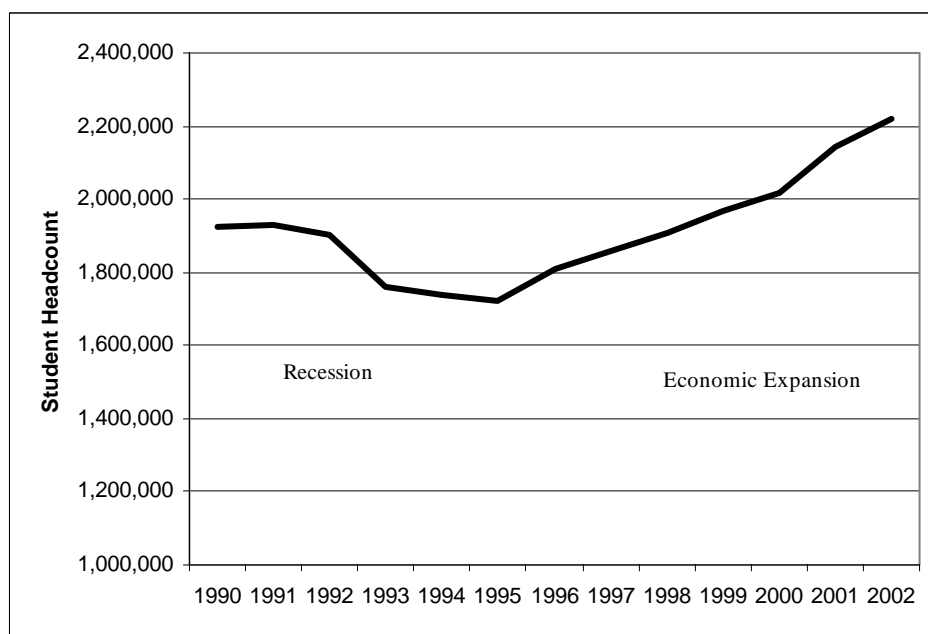
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Enrollment Demand Analyses

Introduction

During California's last economic expansion period that began in 1994 and continued through 2001, undergraduate enrollments at public colleges and universities experienced a dramatic recovery that extended beyond pre-recession levels of the late 1980s. As shown graphically by Display 1, undergraduate enrollments fell from a pre-recession high of 1.93 million in 1990 to 1.76 million in 1993, and then climbed rapidly to 2.22 million in 2002.

DISPLAY 1 Total Public Undergraduate Enrollments, Fall; 1990 to Fall 2002



Until just recently, many educational planners had anticipated that undergraduate enrollments would continue to grow at a modest annual rate of between 2.5 and 3.0 percent. Most of the increase was expected to result from population growth, with the remainder due to modest improvements in college and university participation rates. The public higher education systems, however, had anticipated slightly higher growth and had been lobbying for state funding to support annual enrollment growth closer to 4 percent.

Given the present economic circumstances of the State and the enrollment funding levels contained in the Governor's Budget Proposal, it is unlikely that all of the systems will be able to accommodate the level of demand that had been forecast previously. Even so, it would be a gross mistake to

suggest, conclude, or reason--based solely on Fall 2003 enrollments and early Fall 2004 application figures--that undergraduate demand has declined or tapered-off. To illustrate, there is little doubt that community college enrollments would not have declined by about 4 percent between in Fall 2003 had course offerings not been reduced by between 4 and 5 percent. The Commission agrees, therefore, with the Legislative Analyst's Office (LAO) that a forecast of enrollment demand based on Fall 2002 participation rates is a good point to begin a discussion about future demand.

Accordingly, the next section of this report provides an estimate of enrollment demand for the period 2003 to 2012 that would result if Fall 2002 participation rates remained constant throughout the projection period.

**Enrollment
demand
estimates by
higher education
system based on
constant Fall
2002
participation
rates**

Since the Commission first began publishing enrollment demand projections in 1995, the agency has always produced an estimate for each system that held participation rates constant, and an alternative estimate that provided for modest improvements in college and university participation. The alternative models have been guided by trends in college and university participation rates, strategic initiatives of the higher education systems, and public policy objectives of the State. An example of a long-standing State policy objective is the expressed desire of public officials that the participation of African American and Hispanic students at the University of California continues to improve. The University has responded over time by expanding outreach programs, intensifying community college transfer efforts, and implementing an additional path to UC eligibility called *Eligibility in the Local Context*. In *Providing for Progress* (2000), the Commission derived African American and Hispanic enrollment demand projections for the UC by taking in to account educational equity aims of the State, selected UC initiatives, and recent upward trends in the freshman participation rates of these two ethnic-racial groups at UC.

The Commission's demand estimates that assumed some degree of improvement in participation have proved to be quite reliable in that actual enrollments have tended to come in just above the yearly estimates. For example, between 1996 and 2000, the Commission's undergraduate demand estimates for the University of California have been, on the average, within 98.5 percent of actual enrollments. Thus, the agency's model that held participation rates constant has served as a useful low-end Baseline planning tool.

The Demographic Research Unit of the Department of Finance, as part of its annual projection series, also produces enrollment projections that hold participation rates constant. Because the Demographic Research Unit recently derived higher education projections holding participation rates constant at Fall 2002 levels, it was not necessary for the Commission to produce or replicate that forecast. If economic circumstances

were more favorable, the estimates contained in Display 2, which are based Fall 2002 constant participation rates, suggest that at a minimum the State would need to plan for an additional 453,265 undergraduate students between 2002 and 2012. The enrollment growth would be due to two principal components: (a) population growth, and (b) the continuation and persistence behavior of enrolled students. By higher education system, community college demand would increase by 314,390 (18%), CSU undergraduate demand would increase by 94,403 students (29.6%) and UC undergraduate demand would increase by 44,472 students (28.8%).

DISPLAY 2 Undergraduate Enrollment Demand by Public Higher Education System, Fall 2002 to Fall 2012, Based on Fall 2002 Constant Participation Rates

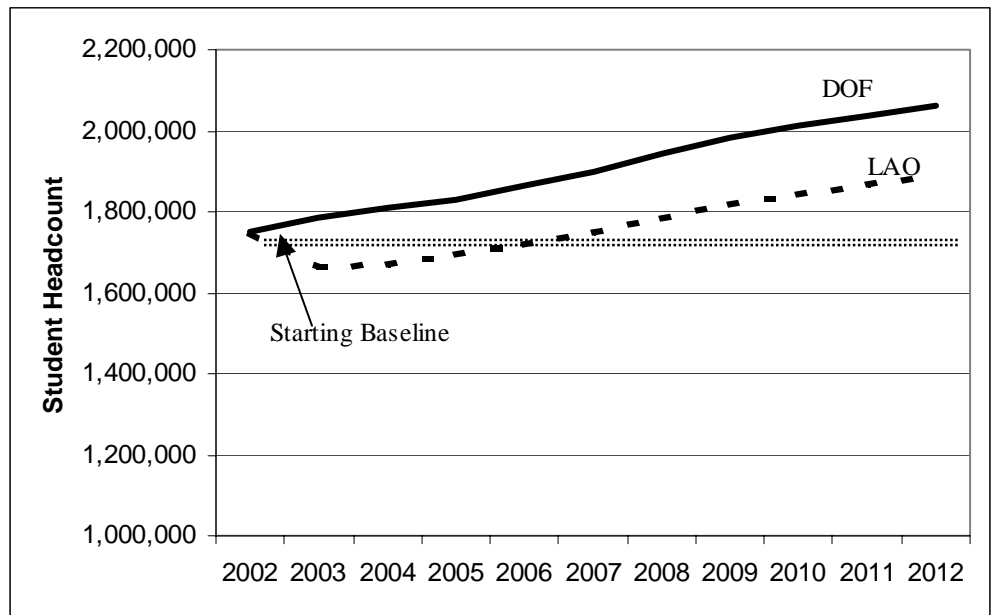
Year	California Community Colleges	California State University	University of California	Grand Total
2002	1,748,549	318,933	154,655	2,222,137
2003	1,783,763	331,148	159,976	2,274,887
2004	1,807,760	340,323	164,142	2,312,225
2005	1,830,227	348,162	167,776	2,346,165
2006	1,864,445	357,141	172,514	2,394,100
2007	1,901,018	365,452	176,795	2,443,265
2008	1,943,470	376,239	182,986	2,502,695
2009	1,983,938	386,997	188,727	2,559,662
2010	2,011,193	396,443	192,977	2,600,613
2011	2,036,821	406,093	196,988	2,639,902
2012	2,062,939	413,336	199,127	2,675,402
<u>Change</u>				
Number	314,390	94,403	44,472	453,265
PCT	17.98%	29.60%	28.76%	20.40%
Compounded				
Annual Change	1.70%	2.60%	2.55%	1.87%

Source: Demographic Research Unit, Department of Finance.
CPEC Staff Analysis.

In response to a request by Assembly Member Carol Liu, 44th District, the Legislative Analyst's Office also produced enrollment demand projections recently holding Fall 2002 participation rates constant. Somewhat surprisingly, the LAO undergraduate demand estimate for year 2012 is about 330,000 students lower than the Department of Finance's projection. The Commission reviewed each agency's model carefully and determined that most of the difference is due to differences in the manner in

which community college estimates were derived. The DOF, like the Commission, uses end-of-term data rather than census data when examining community college enrollment demand. This is because many community college courses permit students to enroll after the third week of classes; end-of-term data capture those late registered students. In contrast, census data only includes enrollments as of the third week of classes. Thus, one would underestimate community college enrollment demand if the analysis were based on historical census data. It appears that LAO generated Fall 2002 participation rates based on census data. Notice from Display 3 that it is not until 2007 that the LAO demand estimates are above the starting Baseline.

*DISPLAY 3 Community College Enrollment Demand Based on Fall 2002
Constant Participation Rates, Department of Finance Projections
Compared with LAO's Projections*



Display 4 includes both undergraduate and graduate demand projections based on Fall 2002 constant participation rates. Again, assuming more favorable economic circumstances, the projections suggest that at a minimum the State would need to plan for an additional 468,197 students between 2002 and 2012. The enrollment growth would be due to two principal components: (a) population growth, and (b) the retention and persistence behavior of enrolled undergraduate and graduate students combined. By higher education system, CSU enrollment demand would increase by 105,243 additional students (25.9%) and UC enrollment demand would increase by 48,563 students (25.8%). The community college projections are the same of those shown in Display 2, which shows and increase of 314,390 students (17.98%).

In the next section, the Commission offers an alternative enrollment demand forecast for the period 2003 to 2013 that provides for modest improvements in some college and university participation rate categories.

*DISPLAY 4 Total Public Higher Education Enrollment, Fall 2002 to Fall 2012, Based on Constant Fall 2002 Participation Rates
(includes Graduate Projections)*

Year	California Community Colleges	California State University	University of California	Grand Total
2002	1,748,549	407,088	188,301	2,343,938
2003	1,783,763	420,276	193,925	2,397,963
2004	1,807,760	430,048	198,193	2,436,001
2005	1,830,227	438,766	202,088	2,471,082
2006	1,864,445	448,841	207,210	2,520,496
2007	1,901,018	458,351	211,962	2,571,330
2008	1,943,470	470,367	218,649	2,632,485
2009	1,983,938	482,269	224,854	2,691,060
2010	2,011,193	493,002	229,639	2,733,834
2011	2,036,821	503,862	234,193	2,774,875
2012	2,062,939	512,331	236,864	2,812,135
Change				
Number	314,390	105,243	48,563	468,197
PCT	17.98%	25.85%	25.79%	19.97%
Compounded				
Annual Change	1.70%	2.60%	2.55%	1.87%

Source: Demographic Research Unit, Department of Finance.
CPEC Staff Analysis.

**Commission's
alternative
undergraduate
demand forecast
based on modest
improvements in
college and
university
participation
rates**

Introduction

The previous section described Baseline levels of undergraduate demand that would be anticipated between 2002 and 2012 if the State could fund and each system could accommodate higher education participation comparable to Fall 2002 levels. To support that level of participation the analysis revealed that the State would need to fund annual enrollment growth of approximately 2.6 percent at the CSU and UC and 1.7 percent at the community colleges. The increase in enrollment would be due to population growth, because the Baseline projections do not provide for any improvements in participation rates beyond Fall 2002 levels.

Of the important concepts and constructs embedded in California's Education Master Plan, three are worth mentioning in this section: *student*

access, student choice, and student educational opportunity. Using those concepts, our purpose here is to offer a reasonable Alternative Undergraduate Demand Forecast that assumes continuation of modest improvements in college and university participation rates in some participation categories.

The Commission is keenly aware that in both the best and worst of economic times there will always be some level of capacity restriction. This is because at any given time the State is only able to fund so much instruction, so much capital improvement, and so much student support services. Naturally, during strong economic times there is relatively more capacity available. Still, the gap between educational opportunity during the best and worst of times should be as minimal as possible, so that student access will not vary demonstrably for students who happen to begin matriculation during unfavorable economic times. By comparing the Commission's alternative forecast to actual enrollments over the near-term, it will be possible for public officials to get at least a general sense of the extent to which, if any, educational opportunity is being restricted, and, if so, how much progress is needed to close the opportunity gap.

**Commission's
alternative
undergraduate
demand forecast**

*DISPLAY 5 Commission's Alternative Undergraduate Demand Forecast
Public Higher Education System, Fall 2002 to 2013*

	California			
	Community	California State	University of	
Fall	Colleges	University	California	Grand Total
2002	1,748,549	318,933	154,655	2,222,137
2003	1,785,245	329,641	159,976	2,274,863
2004	1,820,590	340,710	164,142	2,325,442
2005	1,860,192	352,149	167,776	2,380,117
2006	1,903,369	363,973	172,514	2,439,856
2007	1,945,527	376,194	176,795	2,498,516
2008	1,988,767	390,476	182,986	2,562,229
2009	2,030,015	404,220	188,727	2,622,962
2010	2,071,262	417,229	192,977	2,681,468
2011	2,111,012	427,687	196,988	2,735,687
2012	2,145,087	440,856	199,127	2,785,070
2013	2,178,531	453,107	204,205	2,835,843

Based on enrollment trends observed during the State's economic expansion of the late 1990s, it is very likely that approximately 2.274 million undergraduates would have sought enrollment in public colleges and universities during Fall 2003, given a level of State support for higher education similar to the levels of the late 1990s. Although Fall 2003 actual en-

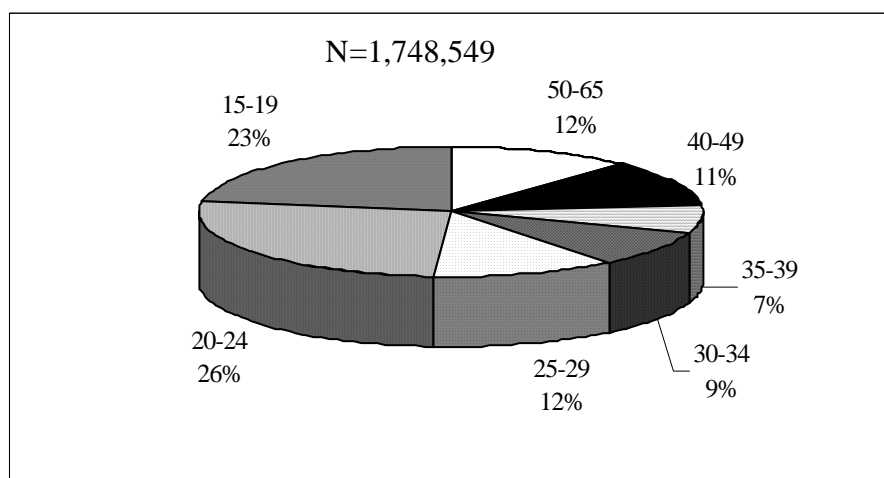
rollments are not yet available, the Department of Finance's preliminary figures indicate that the State served about 2.15 million undergraduates. That figure is about 120,750 students lower than the corresponding figure reported in the Commission's Alternative Forecast. The difference is due primarily to the loss of about 116,306 community college students, which will be discussed momentarily. Notice from Display 5 that the Alternative Forecast shows undergraduate demand topping 2.8 million by year 2013. A forecast summary is provided below for each public higher education system.

**Community
college forecast
summary**

In Fall 2002, 1.78 million students were enrolled in the community college system. Because of budget restrictions, many community college districts have had little choice but to reduce course offerings by about 4 percent. As a result, system-wide enrollments plummeted to an estimated 1.66 million after increasing steadily for the previous seven years. The Commission puts the loss at about 116,306 students—the difference between Fall 2003 actual enrollment and the alternative forecast estimate of 1.78 million. Because the community colleges received priority in the Governor's 2004-05 proposed budget, which provides for 3 percent enrollment growth for this system, it is likely that community college participation rates will begin to recover.

In deriving the Alternative Forecast, the Commission examined recent changes in six age-specific community college participation rates. The rates represent the proportion of Californians of a particular age-group that were enrolled at a public community college during a given quarter or semester.

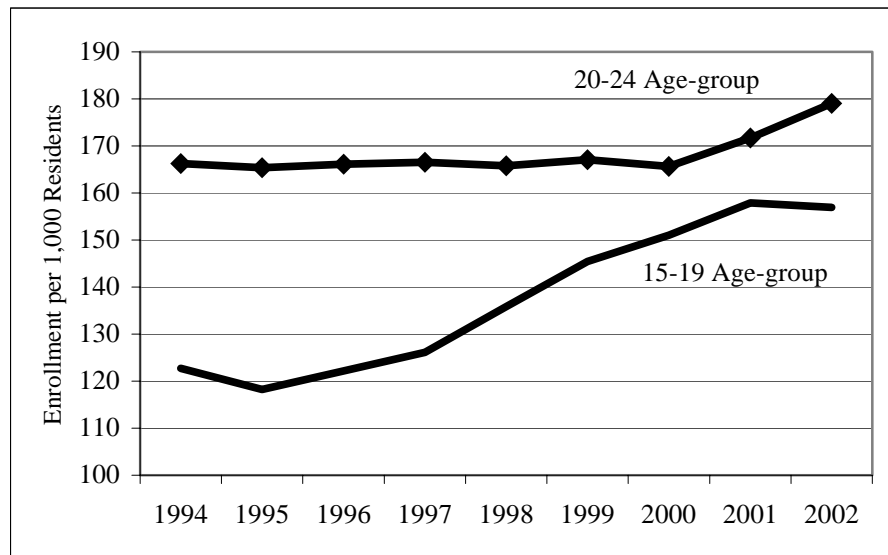
DISPLAY 6 Chart of Community College Enrollment by Age-group, Fall 2002



As shown by Display 6, the 20-24 age-group typically accounts for about 26 percent of community college enrollments, and the 15-19 age-group accounts for about 23 percent. The remaining age-groups account for be-

tween 7 and 12 percent of enrollments each. Notice from Display 7 that the participation rate of the 15-19 age-group increased dramatically recently and crested in 2001, before dipping slightly in 2002. This age-group consists primarily of recent high school graduates, and high school students taking community college courses. Much of the increase here is due to the college course-taking behavior of currently enrolled high school students. Because many community college districts are building outreach centers in close proximity to local high schools, and because it is very likely that an appreciable number of prospective freshmen UC and CSU freshmen might be diverted to the community colleges, the Commission's Alternative Forecast assumes that at a minimum the participation rate for this age-group will return to its peak 2001 level. This would mean that for every 1,000 Californians age 15-19, approximately 158 would be enrolled in a community college. The Commission intends to meet with the planning staff of the Community College Chancellor's Office to better understand recent policy decisions that are intended to restrict the community college enrollment of high school students.

DISPLAY 7 Community College Participation Patterns of Residents Age 15 to 24, 1994 to 2002



In a similar analytic fashion, the Alternative Forecast continued upward modest trends in participation for age-groups under 40, whereas rates for the two remaining age-groups (40-49 & 50-65) were held constant. By 2013, the Alternative Forecast estimates that community college enrollment demand will total 2,178,531. This means that for every 1,000 residents age 15-65, approximately 78 would be enrolled in the community college system. The rate would be up from 69 per 1,000 in 2003 and up from 73 per 1,000 in 2002. Barring any unexpected increases in costs, this level of participation could be accommodated--in regards to instructional

support—if the system receives 3 percent annual increases in enrollment growth funding.

**California State
University
summary**

The Commission's 2001 CSU Regional Enrollment Study and the Department of Finances' 2001 Projection Series both anticipated that CSU undergraduate enrollments would reach approximately 400,000 by year 2010. The Commission's forecast, in part, was based on a careful examination of trends in community college transfers to the CSU and on the number of entering first-time freshmen. It was found that the CSU had been very successful in attracting and enrolling upper-division community college transfers. For example, between 1990 and 1999 community college transfers to the CSU increased by about 30 percent. Given that observed level of success, the Commission's regional forecast extended the age-specific trends in CSU community college transfers through 2010. However, the Commission intends to meet with the CSU to discuss its transfer initiatives and updated community college transfer targets.

Based on a careful analysis of total undergraduate transfers, the Commission's 2001 Regional Study projected that total undergraduate transfers to the CSU would increase from about 47,000 in 1999 to approximately 71,000 by academic year 2010-11. The forecast has been very close to actual transfer figures. For example, the Commission projected 59,256 total transfers for the 2002-03 academic year. The actual transfer figure for that year was 59,287—a small difference of 31 students. Given the high reliability of the regional transfer forecast, the Commission extended it through year 2013 as part of the current Alternative Forecast. By year 2013, it is anticipated that the CSU would be serving approximately 80,000 community college transfers annually if the State could fund that level of enrollment growth.

Unlike the regional transfer forecast, the Commission's regional freshman forecast has understated CSU first-time freshmen demand by about 3 percentage points for each of the past several years. Accordingly, the Alternative Forecast made an upward adjustment. Display 8 shows the annual number of CSU first-time freshmen and corresponding participation rates for the period 1989 to 2002.

Notice that following the recessionary period of the early 1990s, the CSU public high school freshmen participation rate increased from 7.8 percent in 1993 to 11.1% in 2001, and then declined slightly to 10.7% in year 2002. The Commission's Alternative Forecast, shown in Display 9, gradually returns CSU freshman participation to its peak 2001 level. That level will allow for continued improvement in the participation of persons from educationally and economically disadvantaged backgrounds.

DISPLAY 8 *CSU First-Time Freshman Participation Rate, 1989 to 2002*

Year	Public	CSU First-time Freshmen	
	High School Graduates	Number	Participation Rate
1989	244,629	26,792	11.0%
1990	236,291	25,291	10.7%
1991	234,164	23,513	10.0%
1992	244,594	19,874	8.1%
1993	249,320	19,463	7.8%
1994	253,083	22,218	8.8%
1995	255,200	24,060	9.4%
1996	259,071	25,179	9.7%
1997	269,071	25,640	9.5%
1998	282,432	27,736	9.8%
1999	298,602	30,439	10.2%
2000	309,108	32,235	10.4%
2001	315,575	34,886	11.1%
2002	325,397	34,843	10.7%

DISPLAY 9 *CSU First-Time Freshman and Transfer Students Demand, 2003 to 2013, Commission's Alternative Forecast*

Year	CSU	CSU Annual	Total
	First-time Freshmen	Undergraduate Transfers	New Student Demand
2003	43,963	54,426	98,389
2004	44,484	56,669	101,153
2005	45,660	58,711	104,371
2006	48,068	60,802	108,870
2007	49,464	63,135	112,599
2008	52,505	65,509	118,014
2009	52,867	68,233	121,100
2010	52,622	71,309	123,931
2011	53,358	74,161	127,519
2012	53,969	77,128	131,097
2013	53,849	80,213	134,062
Change			
Number	9,886	25,787	35,673
PCT	22.49%	47.38%	36.26%
Compounded			
Annual Change	2.00%	4.00%	3.14%

Based on a 11.1 participation rate level, the CSU would serve approximately 44,587 first-time freshmen from public high schools in year 2013. The figure represents about 83 percent of total CSU freshmen demand. The remaining 17 percent would consist of students from private high schools, students from other states, and students from foreign countries. Thus, total CSU first-time freshmen demand would total 53,849 in year 2013.

Based on the forecast of new CSU freshmen and transfer students, total CSU undergraduate demand under the Alternative Forecast would total 453,107, as shown previously in Display 5.

**University of
California
alternative
forecast
summary**

The Commission’s Alternative UC Forecast is essentially the same as the Baseline Forecast for reasons discussed here. University of California undergraduate demand has been on a dramatic upswing since 1997, with recent annual increases of nearly 5 percent between Fall 2000 and Fall 2002. The University has conducted its own review of recent application pools in anticipation of the Commission’s official Eligibility Study and believes that the system’s eligibility criteria may be encompassing more than 12.5 percent of California’s public high school graduates, which is the limit recommended in the California Higher Education Master Plan. Some UC officials believe that the University’s new path to eligibility, called *Eligibility in the Local Context (ELC)*, probably has contributed to a slight increase in the UC freshman eligibility pool.

ELC is based on the premise that student academic achievement is tied in numerous ways to the level of academic support resources available to students across socioeconomic school districts and regions of the state. Some educators refer to those resources as *social capital*. Based on ELC guidelines, the top-four percent of college-bound seniors of local high schools are considered UC eligible if they successfully complete a set of core course requirements. The Commission’s current Eligibility Study will determine if the UC freshman eligibility pool for the public high school 2003 graduating class was greater than the top 12.5 percent.

Even though the UC freshmen eligibility pool might be reduced in the future, the Commission believes that the Fall 2002 Baseline rates represent a reasonable level of UC freshman demand. This is because continuation of the UC ELC program, coupled with at least marginal success of high school academic reform efforts, particularly with respect to educationally disadvantaged persons, will continue to positively impact college and university readiness. Accordingly, the Commission’s Alternative Freshmen forecast holds participation rates constant at the peak 2002 levels. The Alternative UC Transfer Forecast also is based on Fall 2002 participation levels. Display 10 shows the increase in freshmen and transfer demand based on Fall 2002 participation rates.

DISPLAY 10 *University of California Freshmen and Transfer Demand,
2003 to 2013, Commission's Alternative Forecast*

Year	UC First-time Freshmen	Annual Undergraduate Transfers to UC	Total New Student Demand
2003	32,835	15,365	48,200
2004	33,112	15,716	48,828
2005	33,874	15,976	49,850
2006	35,504	16,377	51,881
2007	36,450	16,579	53,029
2008	38,562	16,932	55,494
2009	38,699	17,063	55,762
2010	38,393	17,953	56,346
2011	38,801	18,594	57,395
2012	39,116	19,252	58,368
2013	39,883	19,735	59,618
Change			
Number	7,048	4,370	11,418
PCT	21.46%	28.44%	23.69%
Compounded			
Annual Change	1.96%	2.53%	2.15%

2

Enrollment Demand Research Questions

THIS SECTION addresses the enrollment demand questions that were outlined in the *Forward* of this report.

1. *What is the level of public higher education enrollment demand that would have been anticipated between 2003 and 2013 if State FTES funding, Student Fees, and course offerings were at levels observed during the favorable economic period, 1996 to 2001? What level of additional FTES capacity would be needed on a yearly basis to accommodate the enrollment growth? What is the increase in marginal cost funding that would be required for instruction?*

The Commission estimates that if economic circumstances were more favorable, undergraduate demand would be comparable to the Alternative Forecast presented in Display 5. Under this forecast, total undergraduate demand would increase from 2.2 million in Fall 2002 to 2.8 million in Fall 2013.

To determine the amount of additional FTES classroom capacity needed to support the Alternative Forecast, it was necessary to consider both graduate and undergraduate demand. Therefore, Display 11 includes the Department of Finance's most recent graduate enrollment projections. The current classroom and laboratory FTES capacity for each system is based on State-adopted space and utilization standards. Given those standards, the California Community Colleges would need an additional 514,030 FTES capacity by 2013, the State University would need an additional 131,651 FTES capacity, and the University of California would need an additional 39,861 FTES capacity.

The Legislative Analyst's Office also just completed a higher education capacity study, which indicated that the systems would not need additional capacity if classroom facilities were in use year around at near 100 percent occupancy levels. The Commission believes that the State could benefit from a careful reexamination of the current space standards.

DISPLAY 11 FTES Classroom Capacity Analysis

System	Fall 2013 Headcount Demand	Annual 2013 FTES En- rollment	Current FTES Capac- ity	Additional FTES Capac- ity Needed by 2013
<u>CCC</u>	2,178,531	1,411,187	897,157	514,030
<u>CSU</u>	533,700	424,7230	293,069	131,651
<u>UC</u>	244,970	227,822	187,238	39,861

Note: UC's current FTES capacity estimate reflects a downward adjustment because the UC Berkeley and UCLA campuses cannot accommodate the level of FTES enrollment implied by the State's space standards.

As shown by Display 12, the instructional cost of serving the additional students implied by the Commission's Alternative Forecast (including graduate students) is approximately \$2.8 billion at today's marginal instructional funding figures per FTES. The breakdown by system is an additional cost of \$1.4 billion for the community colleges, an additional \$859.7 million in instructional-related costs at the State University, and an additional \$510.3 million at the University of California. The cost estimates would be much greater if adjusted for anticipated inflation over the projection period.

DISPLAY 12 Public Higher Education Marginal Cost of Funding Enrollment Growth

Marginal Instructional Cost of Serving Additional Students in 2013-14					
System	Additional Headcount	Additional FTES	Current Cost per FTE	Amount	Percent Increase
CCC	509,592	330,098	\$4,367.0	\$1,441,537,966	30.5%
CSU	123,329	96,000	\$8,956.0	\$859,776,000	30.5%
UC	50,763	47,201	\$10,812.0	\$510,337,212	26.1%
Totals	683,684	473,299		\$2,811,651,178	29.6%

2. *What is the level of undergraduate enrollment currently anticipated between 2003 and 2013 given recent declines in State FTES funding, reduced course offerings, and increases in student fee levels?*

The Commission believes that the Department of Finance's 2003 Projection Series provides a reasonable estimate of undergraduate enrollment levels over the next several years at the California Community Colleges. The projections take into account the 4 percent decline in community col-

lege enrollments that occurred in Fall 2003. If the State elects to fund annual community college enrollment growth of approximately 3 percent over the next several years, it is likely that community college enrollments will gradually approach the Commission's Alternative Forecast. The Department of Finance's 2003 Projection Series is provided in Appendix A.

CSU undergraduate enrollments are also likely to approach the Commission's Alternative Forecast, as State funding to the system is restored; until then, the DOF 2003 Projection Series provides a reasonable estimate of CSU undergraduate enrollments in the near term.

The Commission's Alternative Forecast for the University of California does not differ substantially from DOF's 2003 Projection Series in the near-term, so both projection models should work reasonable well for the University over the next several years. The two projection models yield similar results because UC enrollments are less sensitive to downturns in the State's economy than are enrollment levels at the other two public higher education systems.

3. *If the California State University and the University of California are required to reduce their freshmen enrollments by 10 percent, what is the likely number of qualified prospective first-time freshmen that might be redirected to the California community colleges?*

Although official Fall 2003 enrollments are not yet available, preliminary figures suggests that the CSU served approximately 40,902 first-time freshmen and the University of California served 32,800. Reducing those figures by 10 percent means that the CSU can only accommodate about 36,812 freshmen this coming Fall 2004 and the UC can only provide space for 29,520 entering freshmen. Absence the reduction proposal, the Department of Finance had anticipated 41,367 recent high school graduates enrolling as first-time freshmen at the CSU and 32,795 freshmen enrolling at the UC. Therefore, the potential pool of prospective CSU freshmen that might be subject to redirection could be as large as 4,555. The potential pool of UC freshmen subject to direction could be as large as 3,275. These estimates differ slightly from those provided to the Commission by the systems.

4. *What is the current size of the educational opportunity gap, as measured by the difference between actual Fall 2003 enrollments and the Commission's Alternative Enrollment Demand Forecast?*

As previously noted, many community college districts have had little choice but to reduce course offerings by about 4 percent for Fall 2003. As a result, system-wide enrollments plummeted to an estimated 1.66 million, after having increased steadily for the previous seven years. The Commission puts the loss of educational opportunity at about 116,306

students—the difference between Fall 2003 actual enrollment and the Commission’s alternative forecast demand estimate of 1.78 million.

If the community colleges receive 3 percent enrollment growth for Fall 2004-05 and enrollments increase thereby to 1,719,007, the educational opportunity gap would decrease slightly to an unmet demand of 101,583 students. The gap represents the difference between the alternative demand estimate for Fall 2004 and the 3 percent enrollment growth figure.

The CSU served approximately 324,665 undergraduates in Fall 2003. The Commission anticipates that under more favorable economic circumstances the CSU would have served approximately 329,641 undergraduates. The difference between the two enrollment figures translates to a CSU educational opportunity gap of 4,976. If the CSU receives no enrollment growth funding for Fall 2004-05, and undergraduate enrollments remain at 324,665, the educational opportunity gap would increase to an unmet demand of 16,045 students. This figure includes the 4,555 prospective CSU freshmen that might be redirected to the community colleges.

The University of California system served approximately 159,317 undergraduates in Fall 2003. That number is very close to the Commission’s Alternative Forecast of 159,976 undergraduates, so there does not appear to be a UC educational opportunity gap at this time, as the term *educational opportunity* is defined in this report.

For Fall 2004, the Commission’s Alternative Forecast anticipates the University enrolling about 164,142 undergraduates. If the UC receives no enrollment growth funding for 2004-05, and undergraduate enrollments remain at 159,317, there would be a UC educational opportunity gap of approximately 4,825 implied by the Commission’s Alternative Forecast. It should be mentioned, again, that the Alternative Forecast is based on enrollment trends observed during the State’s economic expansion of the late 1990s. So, in theory, a portion of the opportunity gap would be due to recent increases in student fees that were neither gradual nor predictable of late, thereby pricing out some eligible students who perhaps elected to defer UC matriculation until better economic times.

Appendix A

Public Undergraduate Enrollment Projections Department of Finance's 2003 Projection Series

Year	California Community Colleges	California State University	University of California	Grand Total
2003	1,668,939	324,665	158,783	2,152,387
2004	1,707,238	331,334	164,403	2,202,975
2005	1,745,055	337,819	169,472	2,252,346
2006	1,792,327	345,962	175,158	2,313,447
2007	1,846,934	356,321	180,679	2,383,934
2008	1,905,529	369,841	187,780	2,463,150
2009	1,962,693	383,657	194,099	2,540,449
2010	2,007,056	396,338	198,894	2,602,288
2011	2,050,361	409,106	203,436	2,662,903
2012	2,094,676	419,115	206,218	2,720,009
Change				
Number	425,737	94,450	47,435	567,622
PCT	25.51%	29.09%	29.87%	26.37%
Compounded				
Annual Change	2.56%	2.88%	2.95%	2.63%

